



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** Jay Benesch

**DATE:** 10 Mar 2006

**FROM:** Chris Curtis

**Checked:**

**# :** L1047

**DETAILS:**

Below are the results of the location survey of harps in line C. The Z, X, Y coordinates are given for the components which were surveyed directly from the survey monuments, and not for those surveyed in a local system (i.e. relative to a quad). These are in the survey system with the center of the accelerator at Z=80000, X= 60000 and Y=100 meters. The DZ is given in millimeters to the nearest quadrupole (listed bold), with a positive DZ being downstream. The DX and DY are also in millimeters with respect to ideal beam with a positive DX to the beam left, and a positive DY up. For those components surveyed in a local system, the DX and DY will be relative to the orientation of the quadrupole, and should, therefore, not be considered as an absolute value. The distance from the quad will also affect the accuracy of these values.

Component	Z	X	Y	DZ	DX	DY
<b>QA3C19</b>	<b>79631.8818</b>	<b>59890.8689</b>	<b>99.9780</b>			
IHA3C20	79631.5019	59890.5769	99.9779	479.2	0.2	-0.1
<b>QA3C17</b>	<b>79645.3204</b>	<b>59901.1866</b>	<b>99.9780</b>			
IHA3C17A	79646.1240	59901.8034	99.9780	-1013.0	-0.2	0.0
IHA3C17B	79644.6369	59900.6625	99.9786	861.3	-0.3	0.6
<b>QA3C12</b>	<b>79665.9424</b>	<b>59913.0608</b>	<b>99.9780</b>			
IHA3C12A				-595.8	1.0	-0.1 ( <i>local</i> )
IOR3C12 viewer				554.6	-1.5	0.9 ( <i>local</i> )
IHA3C12B				898.9	-1.2	-0.4 ( <i>local</i> )
<b>QA3C09</b>	<b>79681.0577</b>	<b>59916.7721</b>	<b>99.9780</b>			
IHA3C09				-668.5	-0.9	0.3 ( <i>local</i> )
<b>QA3C08</b>	<b>79686.2339</b>	<b>59917.2450</b>	<b>99.9780</b>			
IHA3C07A				-3499.6	-1.4	2.0 ( <i>local</i> )
IHA3C07B				-1001.2	-0.5	0.4 ( <i>local</i> )